

SUPPORT FOR THE AMENDMENTS

Claims 9-15 are herein canceled. Applicants make no statement with regard to the propriety of the grounds for rejection of these claims and preserve the right to present the rejected claims in a continuation application without prejudice.

Support for Claim 17 is found in Claim 15 and on pages 14-17 of the specification.

Claim 16 is amended to be consistent with and depend from Claim 17.

Support for Claims 18-20 is found beginning on page 15, line 26, and bridging to page 16, in the specification.

Support for Claims 21 and 22 is found beginning on page 16, line 12, and bridging to page 17, in the specification.

Support for Claim 23 is found on page 17, lines 6-9, in the specification.

No new matter is believed added to this application by entry of this amendment.

Upon entry of this amendment, Claims 16-23 are active.

REMARKS/ARGUMENTS

The claimed invention is directed to a process for producing a bipolar plate or an electrode/bipolar plate assembly in fuel cell devices. A method to produce bipolar plates which provide effective delivery of reactants, have low contact resistance and good corrosion resistance is sought.

The claimed invention addresses this problem by providing a process according to Claim 17 and claims dependent thereon. No such process is disclosed or suggested in the cited references.

The rejection of Claim 9 under 35 U.S.C. 102(b) over Cariou (U.S. 4,396,669) is believed moot in view of the cancellation of Claim 9, herein.

Cariou describes a composite article containing vitreous carbon linked to carbon felt fabric. The glassy carbon layer is formed by bonding a polymerizable resin to the felt fabric, polymerizing and carbonizing or graphitizing the polymer(Claim 6). The vitreous carbon layer is described in Col. 1, lines 52-55 as follows:

“This material is called vitreous carbon because it has the appearance and characteristics of a black glass: it has a closed microporosity and is impervious to gas.”

Nowhere does this reference disclose or suggest an impermeable layer of carbon fibres or carbon nanotubes grown on a carbon fibre matrix according to Claim 17 and claims dependent thereon. Moreover, Cariou neither discloses nor suggests densifying a carbon element layer as described in the presently claimed process. Accordingly, Applicants respectfully submit that the cited reference can not anticipate or render the presently claimed invention obvious.

In view of the cancellation of Claim 9, herein, and the foregoing remarks, Applicants respectfully request withdrawal of the rejection of Claim 9 under 35 U.S.C. 102(b) over Cariou.

The rejection of Claim 9 under 35 U.S.C. 102(b) over Miwa et al.(U.S. 5,021,284) is believed moot in view of the cancellation of Claim 9 herein.

Miwa describes a substrate including a porous carbonaceous plate and a gas impermeable electroconductive plate laminated on the carbonaceous plate and bonded thereto by thermoplastic resin (Abstract). The reference describes producing the substrate in Col. 2 lines 58-68, as follows:

“The electroconductive integrated substrate of the invention is produced by laminating a porous carbonaceous plate having a large number of gas permeable pores and a gas impermeable electroconductive plate one upon another with a **thermoplastic resin film, preferably having a thickness of from 10 to 200  $\mu$ m, interposed therebetween, and heating the laminated structure thus obtained under pressure, thereby melting**

**the thermoplastic resin film to bond the porous carbonaceous plate and the gas impermeable electroconductive plate together.”** (Bold added)

Nowhere does this reference disclose or suggest growing an impermeable layer of a carbon element on a face of a carbon fibre matrix and densifying the carbon element layer as according to the presently claimed invention. Therefore, Applicants respectfully submit that the cited reference can neither anticipate nor render obvious the claimed invention.

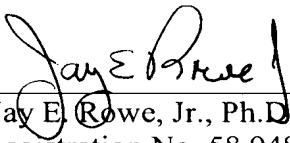
In view of the cancellation of Claim 9, herein, and the foregoing remarks, Applicants respectfully request withdrawal of the rejection of Claim 9 under 35 U.S.C. 102(b) over Miwa.

The rejection of Claims 10-16 under 35 U.S.C. 112, second paragraph is believed obviated by appropriate amendment. Claims 10-15 are herein canceled and Claim 16 is amended to depend from new Claim 17. Withdrawal of the rejection is therefore respectfully requested.

Applicants respectfully submit that the above-identified application is now in condition for allowance and early notice of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

  
\_\_\_\_\_  
Jay E. Rowe, Jr., Ph.D.  
Registration No. 58,948

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)